

Docket No. 010001

Serial No. 09/826,742

REMARKS/ARGUMENTS

Status of Prosecution

Applicant filed the original application on April 5, 2001. The examiner mailed a first, nonfinal Office Action on September 23, 2004. This paper is in Response to that Office Action. Applicant requests reconsideration and withdrawal of the rejections raised in that Office Action. Claims 1 through 26 are pending. In the instant Office Action, the examiner rejected claims 1-26.

Claim Rejections

Rejections under 35 U.S.C. §102

The examiner rejected claims 1-11 and 20-23 under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,026,293 to Osborn ("Osborn"). The rejections are respectfully traversed.

For fundamental teaching on the doctrine of anticipation, one must consider the decision of Judge Rich in *In re William J. King*, 801 F.2d 1324, 231 U.S.P.Q. 136 (Fed. Cir. 1986):

It is axiomatic that anticipation of a claim under § 102 can be found only if the prior art reference discloses every element of the claim, and that anticipation is a fact question subject to review under the clearly erroneous standard. *Lindemann Maschinenfabrik v. American Hoist and Derrick*, 730 F.2d 1452, 1457, 221 U.S.P.Q. 481, 485 (Fed. Cir. 1984). Our review of a finding of anticipation is the same whether it was made by the board or by a district court.

In re William J. King, 801 F.2d at 1326 (emphasis added).

Further, for a reference to anticipate a claim under 35 U.S.C. §102, that reference must teach, or identically describe, each and every element or step of the claim. *See, e.g., Jamesbury Corp. v. Litton Industrial Products*, 756 F.2d 1556, 225 USPQ 253 (Fed. Cir. 1985). "Anticipation" is a restrictive concept, requiring the presence in a single prior art disclosure of each and every element of a claimed invention. Further, as held in *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 927 F.2d 1565, 1576, 18 U.S.P.Q.2d 1896 (Fed. Cir. 1991), "there must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention." (emphasis added). As discussed below, the Osborn patent does not disclose the identical structure and methods described in the claims of the present application.

Referring to independent claims 1 and 20, the examiner cites column 7, lines 60-67, and column 8, lines 1-62 of Osborn as anticipating all elements of each of these claims. However, the only apparatus and function that Osborn describes are various processors and

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memories, where an "audit" hash value derived from memory contents is compared to an "authenticated" or "valid" hash value derived from authentic memory contents to determine whether tampering has occurred with the memory. Importantly, Osborn does *not* describe "a secure unit operatively coupled to the main processor," as claimed in claim 1, or "a secure unit embedded within the main processor," as claimed in claim 20 of the application.

The secure unit of claim 1 of the application includes "a secure processor" and "a secure memory", and the secure unit of claim 20 is "configured to perform secure processing" and "provide secure storage of data." Osborn has no such "secure unit." Referring to Fig. 4 of Osborn, "controller 400 communicates with the flash program memory 420, the RAM 408 and the EEPROM 410 via memory bus 424." Osborn, col. 8, ll. 16-18. "The EEPROM 410 includes user profile data 412, an ESN 414, a MIN 416, and a signed/unsigned valid hash value pair 418." *Id.*, col. 8, ll. 6-8. "Operations involving sensitive data, hash value calculations and authentication processes are preferably carried out in conjunction with the PSRAM 407." *Id.*, col. 8, ll. 13-15. These components do not comprise a secure unit.

Referring also to Fig. 5 of Osborn, after the cellular telephone is turned on and the controller 400 is initialized, "[h]ash code 405 contained in the IROM 403 is then run to perform an audit hash value calculation over selected contents of the flash program memory 420 and the ESN value 414 stored in EEPROM 410 (block 502)." *Id.*, col. 8, ll. 21-27. After this:

[t]he controller then authenticates the signed valid hash value pair 418 stored in the EEPROM 410 (block 504). . . . The authenticated hash value is then stored in PSRAM 407 (block 506). The audit hash value derived at block 502 is then compared with the authenticated hash value derived at block 504 (block 508). If the two hash values match, a microprocessor program counter is set to an appropriate location in the flash memory 420, and a periodic hash value calculation process is enabled (block 510), whereafter the cellular telephone begins normal operation (block 512). If the hash values do not match at block 508, the system is put into an infinite loop (block 514), or is otherwise disabled.

Id., col. 8, ll. 28-42. This text simply discusses multiple unsecured components of a conventional cellular telephone (see also Osborn Fig. 3 - which depicts a conventional cellular telephone) working in conjunction over a shared bus 424 to carry out a comparison between an audit and an authentic hash value in order to detect whether tampering has occurred with the flash memory 420 or the EEPROM 410, and to then merely render the telephone operable or inoperable according to the outcome of the comparison. See, e.g.,

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Osborn, col. 8, ll. 45-46. It does not necessarily secure the telephone from tampering in the first place. Osborn does not provide secure processing or secure data storage. The components in the Osborn patent (e.g., the EEPROM 410, controller 400, flash program memory 420) do *not* comprise "a secure unit operatively coupled to the main processor," as claimed in claim 1, or "a secure unit embedded within the main processor," as claimed in claim 20 of the application.

Additionally, those components of the Osborn patent which perform the comparison between the audit and valid hash values are clearly not "physically encapsulated within a secure module and further configured to prevent unauthorized accesses to the secure memory via hard-coded protocols," as set forth in claim 1 of the application. (emphasis added). These Osborn components also do not prevent "unauthorized accesses to securely stored data via hard coded protocols" as set forth in claim 20 of the application.

The elements of each of the independent claims 1 and 20 of the application are not disclosed in Osborn. The cited art does not support the rejection of claims 1 and 20 and the rejection should be withdrawn. As Osborn does not anticipate independent claim 1, Osborn cannot anticipate dependent claims 2-11 depending from claim 1. The rejection of claims 2-11 is unsupported by the cited art and should be withdrawn.

Regarding independent method claim 21 of the application, the examiner further cites column 3, lines 61-67, column 4, lines 1-8, column 8, lines 19-62, and column 9, lines 30-62 of the Osborn patent as anticipating all elements of the claim. Osborn does not describe any of the elements of claim 21. Column 3, lines 61-67 and column 4, lines 1-8 of Osborn pertain to Fig. 3, which is described as a prior art "conventional cellular telephone memory and processor arrangement." Osborn, col. 3, ll. 62-63. There is no description in this text or elsewhere, including column 8, lines 19-62, and column 9, lines 30-62, in Osborn of a "secure processor" for performing secure processing or "secure storage" for providing secure data storage, nor is there any description for "physically encapsulating the secure processor and secure storage within a secure unit," as provided in claim 21. Column 8, lines 19-62 of Osborn, as discussed in detail above with respect to claims 1 and 20, describe multiple unsecured components of a conventional cellular telephone working in conjunction over a shared bus 424 to carry out a comparison between an audit and an authentic hash value in order to detect whether tampering has occurred with the flash memory 420 or the EEPROM 410, and to then merely render the telephone operable or inoperable according to the outcome of the comparison. The audit hash value calculation is performed periodically. Osborn, col. 8, ll. 47-62. Column 9, lines 30-62 of Osborn simply describe a periodic audit hash value

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calculation. The comparison between an audit hash value and an authentic, or valid, hash value as set forth in Osborn does not involve a secure processor or secure storage physically encapsulated within a secure unit. It is simply a comparison performed by the conventional components of a cellular telephone which then renders the telephone operable or inoperable.

None of the elements of independent claim 21 of the application are disclosed in Osborn. The cited art does not support the rejection of claim 21 and the rejection should be withdrawn. As Osborn does not anticipate independent claim 21, Osborn cannot anticipate dependent claims 22-23 depending from claim 21. The rejection of claims 22-23 is unsupported by the cited art and should be withdrawn.

Rejections Under 35 U.S.C. §103

The examiner rejected claims 12-19, 24-26 under 35 U.S.C. § 103(a) as unpatentable over Osborn in view of U.S. Patent No. 5,987,140 ("Rowney"). The rejections are respectfully traversed. Applicant submits that the differences between the subject matter sought to be patented, and the references cited by the examiner, are not such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains.

As succinctly stated in the MPEP, to establish a *prima facie* case of obviousness, three basic criteria must be satisfied: (1) a suggestion or motivation to modify or combine the cited reference(s); (2) a reasonable expectation of success; and (3) the cited reference(s) must teach or suggest all the claim limitations. See MPEP §706.02(j). The cited references "must expressly or impliedly suggest the claimed invention...." *Id.*

Claims 12-19 depend directly or indirectly from independent claim 1. All claim limitations of the rejected claims 12-19 must be considered, especially when one or more are missing from the cited prior art. Applicant's arguments, *supra*, regarding claim 1 clearly show that Osborn does not anticipate claim 1 and are not repeated here.

The Rowney patent describes secure data transmission between computer systems over a public communication system such as the Internet. Accordingly, the examiner only cites Rowney for discussing one or more security protocols, for action in a client or server role, for the storage of electronic funds, for the storage of cryptographic parameters, and for the storage of authentication certificates. Rowney has nothing to do with a remote terminal in a wireless communication system as set forth in claim 1 of the application. There is no disclosure whatsoever in Rowney pertaining to the elements set out in claim 1 from which claims 12-19 of the application depend. In order to render claims 12-19 obvious over Osborn

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in view of Rowney, all elements of claim 1 must be taught or suggested by Osborn and/or Rowney and there must be some motivation or suggestion to combine these two references to produce the elements of claim 1, and claims 12-19 depending therefrom. This motivation, suggestion or teaching is missing entirely.

For a prima facie case of obviousness to exist, there must be "some objective teaching in the prior art or . . . knowledge generally available to one of ordinary skill in the art [that] would lead that individual to combine the relevant teachings of the references." In re Fine, 837 F.2d 1071, 1074 (Fed. Cir. 1988). There is simply nothing in Rowney to teach or suggest the claim elements of claims 12-19 of the application, alone or in combination with Osborn.

The obviousness rejections of claims 12-19 by the examiner are unsupported by the cited art and should be withdrawn.

Referring to independent claim 24, the examiner points only to Rowney, column 10, lines 31-67 and column 11, lines 1-44 for the obviousness type rejection. This text discusses the process between a customer computer system and a merchant computer system (see Rowney, Fig. 2) for initiating communication (via "hello" procedure), verifying each computer's identity, and exchanging a decryption key. Again, there is no teaching or suggestion in either Osborn or Rowney of a "secure unit" "physically encapsulated within a secure module," or "performing secure processing" for a wireless communication device as set forth in claim 24 of the application. Applicant again refers to the arguments, *supra*, regarding Osborn with respect to claims 1 and 20. Rowney also teaches or suggests nothing about a secure unit physically encapsulated within a secure module for a wireless communication device.

The obviousness rejections of claims 24-26 by the examiner are unsupported by the cited art and should be withdrawn.

Conclusions

For the reasons set forth above, applicant respectfully requests reconsideration and withdrawal of the foregoing rejections.

Applicant respectfully submits that the actions taken by applicant do not raise new issues that would require further consideration or a new search and do not raise new matter.

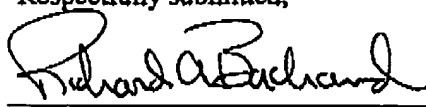
In conclusion, applicant asserts that this Response is complete as contemplated in 37 CFR §1.111, that claims 1-26 are patentable for the reasons set forth above, and that the application is now in condition for allowance. Accordingly, applicant respectfully requests an early notice of allowance.

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Applicants therefore respectfully request that a timely Notice of Allowance be issued in this case.

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